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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/480,390	01/11/2000	Michael P. Wagner	1956/126	4259

2101 7590 03/18/2002

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EXAMINER

TO, BAOQUOC N

ART UNIT PAPER NUMBER

2172

DATE MAILED: 03/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

SH

Office Action Summary

Application No.

09/480,390

Applicant(s)

WAGNER, MICHAEL P.

Examiner

Baoquoc N To

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Claims 1-40 are represent for examination.

2. ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker (US. Patent No. 6,223,204).

Regarding on claims 1, 11, 21, and 31, Tucker teaches a method for providing mutual exclusion (col. 1, line 58) for a resource by a first process [52, fig. 3] in a computer system having a plurality of processes, the method comprising:

Receiving an inquiry from a second process inquiring whether said first process (52, try to acquire mutex lock) owns said resource [col. 4, lines 7-12];

Tucker does not explicitly teach determining an owner process for said resource other than said first process; and creating a lock for said resource indicating said owner process. However, Tucker teaches "if the lock is not acquired (e.g. the lock is held by other prior schedule thread), the thread owning the particular mutex lock is identify 54" [col. 4, lines 12-14]. In addition, the second process can "acquire the mutex lock by repeating the step 52-56." [col. 4, lines 17-18]. The second thread can attempt to

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acquire the lock again through the same process and lock the resource when the lock is available. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to acquire lock, the second process must identify the owner of the lock for requesting to access the resource.

Regarding on claims 2, 12, 22 and 32, Tucker does not explicitly teach determining the owner process for the resource other than the first process comprises:

determining that the first process is not the owner process; and determining thereby that the second process is the owner process. However, Tucker teaches the first process own the lock at "54" and when the lock is free at (56a) and the second process can acquire the lock at the second time around at (52). This implies the second process is the owner process. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include the second process owning the lock when the first process release the lock or lock is available.

Regarding on claims 3, 13, 23, and 33, Tucker teaches determining the owner notification message identifies the second process as the owner process [col. 5, lines 39-44].

Regarding on claims 4, 14, 24, and 34, Tucker teaches the owner notification message identifies the second process as the owner process [col. 5, lines. 39-44].

Regarding on claims 5, 15, 25 and 35, Tucker teaches the owner notification message identifies a third process as the owner process [col. 5, lines 39-44].

Regarding on claims 6, 16, 26 and 36, Tucker teaches determining the owner process for the resource other than the first process comprises:

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Receiving an inquiry response from a third process indicating that said third process is not the owner process; and determining thereby that the second process is the owner process [col. 4, lines 8-18].

Regarding on claims 7, 17, 27 and 37, Tucker teaches determining the owner process for the resource other than the first process comprises:

Receiving an inquiry response from a third process indentifying said third process as the owner process [col. 4, lines 8-18].

Regarding on claims 8, 18, 28, and 38, the lock comprises:

A resource identifier [col. 4, 9-11]; and

A home field identifying the owner process [col. 4, lines 13-14].

Regarding on claims 9, 19, 29, and 39, Tucker teaches the owner process notification message identifies the second process as the owner process further comprising:

Determining that the first process requires access to the resource [col. 4, lines 11-14];

Identifying the owner process using the lock [col. 4, 14-15]; and

Sending a request message to the owner process requesting access to the resource without first sending an inquiry message to the owner process [col. 5, lines 12-14].

Regarding on claims 10, 20, 30 and 40, Tucker teaches identifying the owner process using the lock comprises:

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finding the lock among a plurality of locks based upon a resource identifier [col. 4, lines 8-15]; and obtaining the owner process from the lock [col .4, lines 8-15].

3. ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail baoquoc.to@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached at (703) 305-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

- (703) 746-7238 [After Final Communication]}
- (703) 746-7239 [Official Communication]
- (703) 746-7240 [Non-Official Communication]

Hand-delivered responses should be brought to:

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KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Baoquoc N. To

March 10, 2001